

## **AN ASSESSMENT OF SERVICE QUALITY OF LOGISTICS SERVICES PROVIDERS IN GHANA**

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**ABSTRACT:** *This study was aimed to assess service quality of logistics service providers (courier services) in the Kumasi metropolis of Ghana. The study was a cross sectional descriptive survey. The target population of the study was customers of the selected courier services providers. The study deployed stratified sampling technique and 120 sample size. The SERVQUAL Model was the underpinning philosophy adopted for the study. Structured questionnaire were used. Data were gathered through primary and secondary sources. The primary data were analyzed using Predictive Analytical Software (PASW) for windows. Secondary data were obtained from data bases including Pro-Quest, EBSCO, Open Access Directorate, Google Scholar, Cross- Ref and Index Copernicus. The results were presented using unweighted means, Chi-square Tests and frequencies. The study revealed that overall customers were satisfied with all the five service quality dimensions. Specifically respondents rated their satisfaction as follows: Assurance Empathy, Tangibility, Responsiveness and Reliability. The study further revealed there is a significant association between customer's location and satisfaction. Also, the study found that there is an association between customers preferred brand and satisfaction. Finally, there is significant association between customers perceived service safety and satisfaction. The study concluded that logistics service providers should aim at delighting their customers to ensure customer loyalty in order to prevent any switch in the future.*

**KEYWORDS:** SERVQUAL, Logistics, Service Providers, Courier, Ghana

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### **INTRODUCTION**

Logistic services are among the most demanded businesses in the world today. The advent of the Information and Communication Technology (ICT) has also facilitated the logistics activities across boundaries. Porter value chain model tells us more about the role of ICT in achieving efficiency in service delivery. The term logistic has been variously defined. In most cases the term is used to describe the movement of goods from the point of production to a point of consumption usually to meet the urgent requirement of a customer and as well as corporate entities. The logistics activities involve physical items as well as immaterial items. The most common physical items include food, raw materials, animals, equipments, and liquids. The immaterial items usually include; time, information, energy and particles (Tazreen, 2012; Ramez, 2012; Porter, 1980).

The Logistics of physical items combined the following processes to arrive at customer destination. These information flow processes include; material handling, production, packaging, inventory, transportation, warehousing and sometimes security. The chain could be longer and the vice versa depending on the industry one is dealing with. And the changing dynamics in the production systems could also affect the chain (Porter, 1980).

The increasing global competition among companies in the production cycle has not only yielded quality products and services but has also increased production in terms of quantity. This development according to Ajakaiye (2012) is over burdening enterprises as they are faced with the huge challenge of shipping raw materials from vendors as well as finish goods to their customer. These situations make the demand for logistic service providers imperative. However, the logistics services providers are in categories. The notably ones include logistic inter-mediatizes, carriers and third party logistics service providers. This paper is aimed at deploying SERVQUAL Model to assess customer satisfaction with the courier service providers in Ghana. The courier service providers among other handling of packages, by –your door shipping and other consignments. These companies usually operate both home and abroad. In recent times demand for these services has raised to high altitudes due to continuous increase in international business and regional integration (Mathew& Jagannathan, 2015).

The crux of this paper is that individuals as well as corporate entities continue to engage in the services of the logistic services providers particularly the courier logistics. However, the extent to which customers are satisfied with the kind of service they received has not been adequately explored. The customers have become more assertive than it used to be. A mere reduction in the price is no longer considered enough by the customer. The customers would like to be treated as Kings and Queens; they want to be seen at Assets and the Life Blood of the business. In view of the above, this study is conducted to evaluate customer's satisfaction with the courier service providers in the Kumasi metropolis of Ghana.

### **Theoretical Orientation of the Study**

This study deployed SERVQUAL Model as the underpinning theoretical paradigm to measure the extent of customer's satisfaction with the logistic service providers in Ghana. The Servqual model is considered among the most dominant instruments for measuring quality and determining customer satisfaction. The model was standardized in the last 1980s courtesy Parasuraman, Zeithaml and Berry. The model initially comprised of 10 determinants (access, security, courtesy, credibility competency, communication, knowing the customer, tangibility reliability and responsiveness) with 97 items but subsequently these were reduced to 5 dimensions enabling the acronym RATER (Reliability, Assurance, Tangibility, Empathy and Responsiveness) with 22 items. The table below presents empirical reviews on the model

**Summary Presentation of Empirical Review**

<b>Author (s)Year</b>	<b>Objectives</b>	<b>Major findings</b>
<b>Meybodi (2012)</b>	Measuring Service Quality Using Servqual Model	Meybody (2012) study discovered that that there are significant differences between donor expectation and the actual quality in all the five quality dimensions
<b>Ramez (2012)</b>	Patients' Perception of Health Care Quality, Satisfaction and Behavioral Intention	Ramez (2012) found out that the patients perceived quality was more sufficient than the serqual scale in explaining the variance in the service quality
<b>Çerri1 (2012)</b>	Assessing The Quality Of Higher Education Services Using A Modified Servqual Scale	Cerril (2012) study also revealed that the serqual model is reliable in assessing quality in the public sector just as it is in the private sector.
<b>Roopchund &amp; Boojhawon (2014)</b>	Applying The Servqual Model In Postal Services : A Case Study Of Mahebourg Mauritius Post Services Ltd.	Roopchund & Boojhawon (2014) these Authors found that The quality dimension of responsiveness is ranked the highest but customers need improvement in all dimensions
<b>Tazreen (2012)</b>	An Empirical Study of Servqual as a Tool for Service Quality Measurement	Tazreen (2012) posited from the perspective of specific service sector that deploying contemporary quality model to measure quality is considered ideal.
<b>Qadri (2015)</b>	Measuring Service Quality Expectation and Perception Using SERVQUAL: A Gap Analysis	Qadri (2015) concluded that there is a huge gap between perceptions and their expectations regarding service quality provided by the banks in Pakistan.
<b>Parasuraman, Zeithaml, &amp; Berry (2010)</b>	A Conceptual Model of Service Quality and Its Implications for Future Research	Parasuraman, Zeithaml & Berry (2010) promoted that the new conceptual model will aid academics and professionals and span our interest in service quality as a framework for further empirical research in this important area
<b>Mathew&amp; Jagannathan (2015)</b>	Study Based on Servqual Dimensions in Service Industry - A Literature Review	Mathew & Jagannathan (2015) concluded that the Servqual model the model did not cover service design and corporate social responsibility which are important in quality determination
<b>Burböck (2014)</b>	Prospect Theory and Servqual.	The author affirmed that the Servqual model can be used in entirety in the automobile industry.

*Source: Authors Compilation*

**METHODOLOGY**

This study was aimed to assess service quality of logistics service provider in the Kumasi metropolis of Ghana. The study was a cross sectional descriptive survey. The target population of the study was customer of the selected courier services providers. The study deployed stratified sampling technique and 120 sample size. The SERQUA Model was adopted for the study. Structured questionnaire were used. Data were gathered through primary and secondary

sources. The primary data were analyzed using Predictive Analytical Software (PASW) for windows. The respondents were assured of anonymity of their responses. Secondary data were obtained from sources including Pro-Quest, EBSCO, Open Access Directorate, Google Scholar Cross- Ref and Index Copernicus.

## FINDINGS AND DISCUSSIONS

### Demographic

Out of the 120 sample selected, it was revealed that, majority (55%) were in the services sector, other 37.5% were in the manufacturing sector however, 7.5% were sales executives. Majority (68%) of the businesses were in the Kumasi Metropolis, moreover, 31.7% were outside Kumasi metropolis. Regarding brands of the courier, majority (40.8%) adopted DHL other 26.7% embraced FedEx another, 16.7% adopted EME notwithstanding 15.8% embraced UPS. Majority (61.7%) selected a particular Brand of the courier due to its accuracy, other 21.7% selected the brand due to the fastness of the service meanwhile 16.6% selected the brand because of its prompt delivery. Majority (67.5%) pay for the courier using cash however, 32.5% uses credit to pay for their courier. With regards to safety of courier service, 78.3% agreed that service delivery was safe meanwhile other 21.7% contended that service delivery was safe. Majority (53.3%) collected or received their parcel at the courier's office in person while as 46.7% on the other hand received their parcel from the courier's premises.

### Tangibility Aspects of Quality of Courier's Service

<b>Tangibility</b>	<b>Excellent</b>	<b>Good</b>	<b>Moderate</b>	<b>Bad</b>	<b>Poor</b>	<b>X Score</b>
Courier receipt forms	60	30	30	0	0	4.25
Security dealings	0	94	10	16	0	3.65
Courier location	52	18	40	0	10	3.85
Ventilation	56	54	0	10	0	4.30
Ware houses facility	48	56	0	10	6	4.08
<b>Unweighted Mean</b>						<b>4.03</b>

Source: Field Data, 2016.  $X$ =Mean.

With respect to the Tangibility of quality of services delivery by the couriers, the study discovered that, 60 respondents said couriers receipt forms were excellent. Another 30 respondents said the receipt forms were good, meanwhile 30 said the receipt forms were moderate in quality delivery. In addition, 94 respondents said security dealings was good, other 10 said it was moderate, however, 16 said security dealings was bad. Again, 52 respondents said the location for collection was excellent, 18 said it was good. Other 40 said the location for collection was moderate meanwhile 10 respondents said the location was poor. Furthermore ventilation at place of collection was excellent as confirm by 56 respondents, likewise 54 respondents supported that ventilation was good however, 10 respondent said ventilation at the place was bad and 6 also said the ventilation was poor. Finally, 48 respondents stated that the ware houses facility was excellent, similarly, 56 indicated it was good notwithstanding 10 respondents restated that the ware houses facility was bad as 6 yet confirm that the ware houses facility was poor.

**Assurance Aspects of Quality of Courier's Service**

<b>Assurance</b>	<b>Excellent</b>	<b>Good</b>	<b>Moderate</b>	<b>Bad</b>	<b>Poor</b>	<b>X Score</b>
Safety of transaction	60	60	0	0	0	4.50
Goods safety	80	18	16	6	0	4.43
Working hours	100	10	0	10	0	4.67
Over time hours	120	0	0	0	0	5.00
<b>Unweighted Mean</b>						<b>4.7</b>

Source: Field Data, 2016.  $X = \text{Mean}$ .

Regarding the assurance of quality of courier's services delivery, 60 respondents indicated that, safety of transaction was excellent, 60 respondents on the other side of coin stated that safety of transaction was also good. 80 respondents supported that goods safety was excellent, likewise 18 approve that it was good, meanwhile, 16 argue that Goods safety was moderate in terms of assurance and 6 stated that Goods safety was bad. Additionally, 100 respondents retained that, working hours was excellent; other 10 supported that it was good nevertheless 10 respondents also admitted that, working hours was bad. To conclude, 120 respondents embraced that, over time hours was excellent.

**Reliability Aspects of Quality of Courier's Service**

<b>Reliability</b>	<b>Excellent</b>	<b>Good</b>	<b>Moderate</b>	<b>Bad</b>	<b>Poor</b>	<b>X Score</b>
Employee reliability	18	30	42	10	20	3.13
High delivery reliability	38	76	0	6	0	4.22
Service variety	10	98	6	6	0	3.93
Customer service	42	72	0	6	0	4.25
Service change	18	92	10	0	0	4.07
Speed transfer services	64	20	26	10	0	4.15
<b>Unweighted Mean</b>						<b>4.0</b>

Source: Field Data, 2016.  $X = \text{Mean}$ .

With respect to Reliability of quality of courier's service delivery, 18 respondents claimed that employee's reliability was excellent, similarly, 30 agreed that their reliability was good however, 10 and 20 respondents suggested that employees reliability was bad and poor respectively. 38 respondents stated that high delivery reliability was excellent, other 76 supported that their reliability was good nevertheless 6 argue that high delivery reliability was bad. Adding 10 respondents agreed that service variety was excellent in service delivery; other 98 respondents indicated that service variety was good meanwhile 6 respondents argue that service variety was moderate and 6 also contended service variety badly. Furthermore, 42 respondents admitted that customers service was excellent, 72 respondents also believe that customers service was good moreover 20 supported it was moderate. Unpredictably, 18 respondents confess that service change was excellently delivered, likewise 72 admitted that service change was good conversely, 10 respondents moderately accepted service change. At the end of it all, 64 respondents agreed that speed transfer service was excellent, 20 respondents supported and also 26 respondent admitted that speed transfer service was moderate however, 10 respondents instigated that speed transfer service was poorly delivered.



**Responsiveness Aspects of Quality of Courier's Service**

<b>Responsiveness</b>	<b>Excellent</b>	<b>Good</b>	<b>Moderate</b>	<b>Bad</b>	<b>Poor</b>	<b>X Score</b>
Delivery quality	72	22	10	6	10	4.17
Delivery time	68	16	0	10	26	3.75
Order quality	48	62	10	0	0	4.34
Relationship	0	94	10	16	0	3.65
Service promptness	52	12	40	0	16	3.70
Order size flexibility	56	54	0	10	0	4.30
<b>Unweighted Mean</b>						<b>4.0</b>

Source: Field Data, 2016.  $X = \text{Mean}$ .

Regarding the responsiveness of quality of courier's services, 72 respondents admitted that delivery quality was excellent, 22 also admitted that delivery quality was good and 10 respondents agreed that delivery quality was moderate, however, 6 respondents accepted that delivery quality was badly held. 68 respondents agreed that delivery time was Excellent; other 16 believed that delivery time was good moreover, 10 respondents argued that delivery was bad conversely, 26 respondents disputed it poorly. In addition, 48 respondents admitted that order quality was excellent, 62 respondents also supported that order quality was good and 10 argued that the service was moderate. Majority (94) of the respondents added that courier's relationship was excellent and other 10 argued that their relationship was moderate nevertheless, 16 respondents upheld that their relationship was bad. 52 respondents addressed that couriers service promptness was excellent, likewise, 12 was good, and also 40 respondents argued that couriers service promptness was moderate to them however, 16 explained that their service promptness was poorly delivered. Finally, 56 respondents admitted that, order size flexibility was excellently delivery by couriers; similarly, 54 admitted that, order size flexibility was good meanwhile 16 argued that their service was poorly delivered.

**Empathy Aspects of Quality of Courier's Service**

<b>Empathy</b>	<b>Excellent</b>	<b>Good</b>	<b>Moderate</b>	<b>Bad</b>	<b>Poor</b>	<b>X Score</b>
Employee behaviour	48	46	0	20	6	3.92
Delivery by date request	88	32	0	0	0	4.73
Immediate response to problem	80	18	16	6	0	4.43
Solving the problem	110	10	0	0	0	4.92
Pro-activeness	90	30	0	0	0	4.75
<b>Unweighted Mean</b>						<b>4.6</b>

Source: Field Data, 2016.  $X = \text{Mean}$ .

As disclosed by the study, 48 respondents accepted that, employees behaviour was excellent, other 46 supported that their behaviour was good meanwhile 20 argued that their behaviour was very bad. Majority (88) of the respondents admitted that, Delivery of goods at the requested date was excellent; other 32 also agreed Delivery of goods at the requested date was very good. adding, 80 respondents admitted that employees immediate response to problems was excellent, 18 supported also that their response was good and 16 argued that their response was moderate notwithstanding, 6 dispute it badly. Also, 110 respondents agreed that employees ability to solve problem was excellent, 30 likewise admitted that their ability to solve problems was good as well. In conclusion, 90 respondents admitted that employee's pro-activeness was

excellent, moreover, 30 respondents also supported that the employees pro-activeness was good as well.

#### Overall satisfaction of service quality of courier services

Items	Frequency	Percent
Poor	20	16.7
Bad	16	13.3
Moderate	42	35.0
Good	30	25.0
Excellent	12	10.0
<b>Total</b>	<b>120</b>	<b>100.0</b>

Source: Field Data, 2016.

With respect to the overall satisfaction of service quality of courier's services, majority (35%) admitted that employees service delivery was moderately satisfied, other 25% also supported that employees service delivery was really good. Unpredictably, 16.7% agreed that employee's service deliver was poorly satisfied, however, 13.5% supported that their service was really bad, surprisingly; merely 10% admitted that employee's service delivery was excellent.

#### Relationship between Satisfaction and Services safety

Services safety	Overall satisfaction of service					Total
	Poor	Bad	Moderate	Good	Excellent	
Yes	14	16	31	27	6	94
No	6	0	11	3	6	26
Pearson Chi-Square	13.832 <sup>a</sup>					
Likelihood Ratio	16.559					
Linear-by-Linear Association	.396					
P-value	.008					
Degree of freedom	4					

Source: Field Data, 2016

The Karl Pearson chi-square fitness of good test reveals that there is an association between customer's safety and their overall satisfaction. Chi-square calculated value (13.832) is greater than chi-square tabulated value (9.488). Hence the null hypothesis is rejected. There is a significant association between customers and their overall satisfaction.

**Relationship between Satisfaction and Brands of the courier**

Brands of the courier	Overall satisfaction of service					Total
	Poor	Bad	Moderate	Good	Excellent	
EME	3	3	7	7	0	20
UPS	3	3	10	3	0	19
DHL	7	7	15	17	3	49
FEDEX	7	3	10	3	9	32
Pearson Chi-Square	24.913 <sup>a</sup>					
Likelihood Ratio	26.020					
Linear-by-Linear Association	1.005					
P-value	.015					
Degree of freedom	12					

Source: Field Data, 2016

Chi-square fitness of good test reveals that there is an association between brands of courier and student's overall satisfaction. Chi-square calculated value (24.913) is greater than chi-square tabulated value (21.026). Hence the null hypothesis is rejected. There is a significant association between brand of courier and students overall satisfaction.

**Relationship between Satisfaction and their Location**

Location	Overall satisfaction of service					Total
	Poor	Bad	Moderate	Good	Excellent	
	17	9	23	21	12	82
	3	7	19	9	0	38
Pearson Chi-Square	12.821 <sup>a</sup>					
Likelihood Ratio	16.506					
Linear-by-Linear Association	.299					
P-value	.012					
Degree of freedom	4					

Source: Field Data, 2016

The chi-square test revealed that there is an association between location and students overall satisfaction. Chi-square calculated value (12.82) is greater than chi-square tabulated value (9.488). Hence the null hypothesis is rejected. There is a significant association between location and student's overall satisfaction.

**CONCLUSIONS AND RECOMMENDATIONS**

The study revealed that overall customers were satisfied with all the five service quality dimensions. Specifically respondents rated their satisfaction as follows: Assurance (M=4.7), Empathy (M=4.6) Tangibility (M=4.03) Responsiveness (M=4.0) and Reliability (M=4.0). The study further revealed there is a significant association between customers location and



satisfaction ( $df = 4$ ,  $X^2 = 12.821$ ,  $p\text{-value} < 0.05$ ). Also, the study found that there is an association between customers preferred brand and satisfaction ( $df = 12$ ,  $X^2 = 24.913$ ,  $p\text{-value} < 0.05$ ). Finally, there is significant association between customers perceived service safety and satisfaction ( $df = 4$ ,  $X^2 = 13.832$   $p\text{-value} < 0.05$ ). The study concluded that logistics service providers should aim at delighting their customers to ensure loyalty. Kano model can play a role in this. Moreover, service provider can adopt the Kaisen quality principles to ensure continues improvement.

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